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Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Section 73.622(b))
DTV Table of Allotments)
Television Broadcast Stations)
(Sumter, South Carolina))

MM Docket No.
RM No.

To: Magalie Roman Salas, Secretary
for direction to
The Hon. Roy J. Stewart, Chief
Mass Media Bureau

PETITION FOR RULEMAKING

1. McLaughlin Broadcasting, Inc. ("McLaughlin"), licensee of television station WQHB, Sumter, South Carolina, petitions the Commission to institute a rulemaking proceeding to amend Section 73.622(b) of its rules to substitute DTV channel 39 in lieu of DTV channel 38 as WQHB's paired channel. The proposed amendment is to change the listing from "Sumter, South Carolina, *28c, 38" to "Sumter, South Carolina, *28c, 39."

2. This proposal is in accordance with all technical and engineering requirements as shown in the Engineering Statement of Kevin T. Fisher of the firm Smith & Fisher, whose credentials are well-established and known by the Commission, attached as Appendix 1.

3. This proposal serves the public interest. Station WQHB has been in operation on analog channel 63 since the Fall of 1997. Its initial licensed facilities are relatively modest and the paired digital channel 38 matched those modest facilities. In October 1999, McLaughlin duly filed an application for digital operation on channel 38 proposing the maximum facilities for the

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channel. A further maximization on channel 38 is not available.

4. A substantial upgrade and expansion of the service of WQHB is available. With regard to analog channel 63, a tall-tower facility was approved by the Commission in March 1999 (File No. BMPCT-960125KE). There is currently pending before the Commission an application for modification of the tall-tower proposal (File No. 19991126ABW). Upon approval of the modified proposal, an upgraded analog operation is planned for the near future.


5. While digital channel 38 is a deadend in terms of any improvement in the modest initial operating facility of WQHB, adjacent digital channel 39 is not. The Engineering Statement of Mr. Fisher shows that channel 39 can be allotted in accordance with all technical requirements under which the upgraded, tall-tower analog operations of WQHB will be matched by pairing those operations with digital channel 39 in lieu of digital channel 38. To illustrate the difference, the population that would be served by the maximum use of digital channel 38 is approximately 690,000 persons; the population that would be served by the maximum use of digital channel 39 is approximately 920,000 persons, an increase of 35%.

6. McLaughlin timely filed a notice of its intent to seek maximization of its digital facilities on December 30, 1999 (attached as Appendix 2). The instant petition proposes to employ adjacent digital channel 39 for that purpose. Cf., Establishment of a Class A Television Service, Report and Order

released April 4, 2000, Allotment Adjustments (¶¶61-64).

7. If the Commission grants this petition and modifies the DTV Table of Allotments accordingly, McLaughlin is committed to applying for and constructing its digital station on channel 39 with maximized facilities as proposed.

Respectfully submitted,



Gene A. Bechtel

Bechtel and Cole, Chartered
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Washington, D.C. 20036
Telephone 202-833-4190
Telecopier 202-833-3084

Counsel for McLaughlin
Broadcasting, Inc.

May 1, 2000

APPENDIX 1

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of MCLAUGHLIN BROADCASTING, INC., licensee of Television Station WQHB(TV) in Sumter, South Carolina, in support of its Petition for Rulemaking to substitute DTV Channel 39 for its Channel 38 DTV allotment in Sumter.

The petitioner has filed an Application for Construction Permit (BPCT-19991126ABW) to locate WQHB(NTSC) at a new site which will afford better coverage of the market. Unfortunately, due to interference concerns, the WQHB digital facility on Channel 38 cannot be located at the new site. However, our detailed channel search reveals that DTV Channel 39 can be used in Sumter from the specific site of proposed WQHB(NTSC) and with specific, maximized operating parameters.

The proposed site, at 34° 06' 33", 80° 44' 35", is plotted in Exhibit B. A 262-meter tower has been approved for this location. For the purposes of our interference studies, we assumed that a Propagation Systems (PSI) directional antenna would be side-mounted on this tower, as shown in Exhibit C. The proposed effective antenna height is 345 meters AMSL, and the main-lobe maximum ERP is 500 kw. Proposed operating parameters are listed in Exhibit D, and Exhibit E provides the antenna radiation pattern data for the proposed antenna, which is to be oriented at 180° true. Exhibit F is a tabulation of terrain and contour data for the proposed facility.

The predicted WQHB-DT 41 db μ contour is plotted in Exhibit G. As shown, the entire community of Sumter is contained within the proposed 41 db μ contour, as required by

EXHIBIT A

§73.623(c)(1) of the Rules. Exhibit H is an interference study, which concludes that the proposed facility meets the requirements of §73.623(c)(2) of the Rules with respect to both NTSC and DTV facilities.

Therefore, we respectfully request that the Commission amend its Digital Television Table of Allotments in §73.622(b) of the Rules by substituting Channel 39 for Channel 38 in Sumter, South Carolina, as follows:

<u>Community</u>	<u>Present Allotments</u>	<u>Proposed Allotments</u>
Sumter, South Carolina	*28c, 38	*28c, 39

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

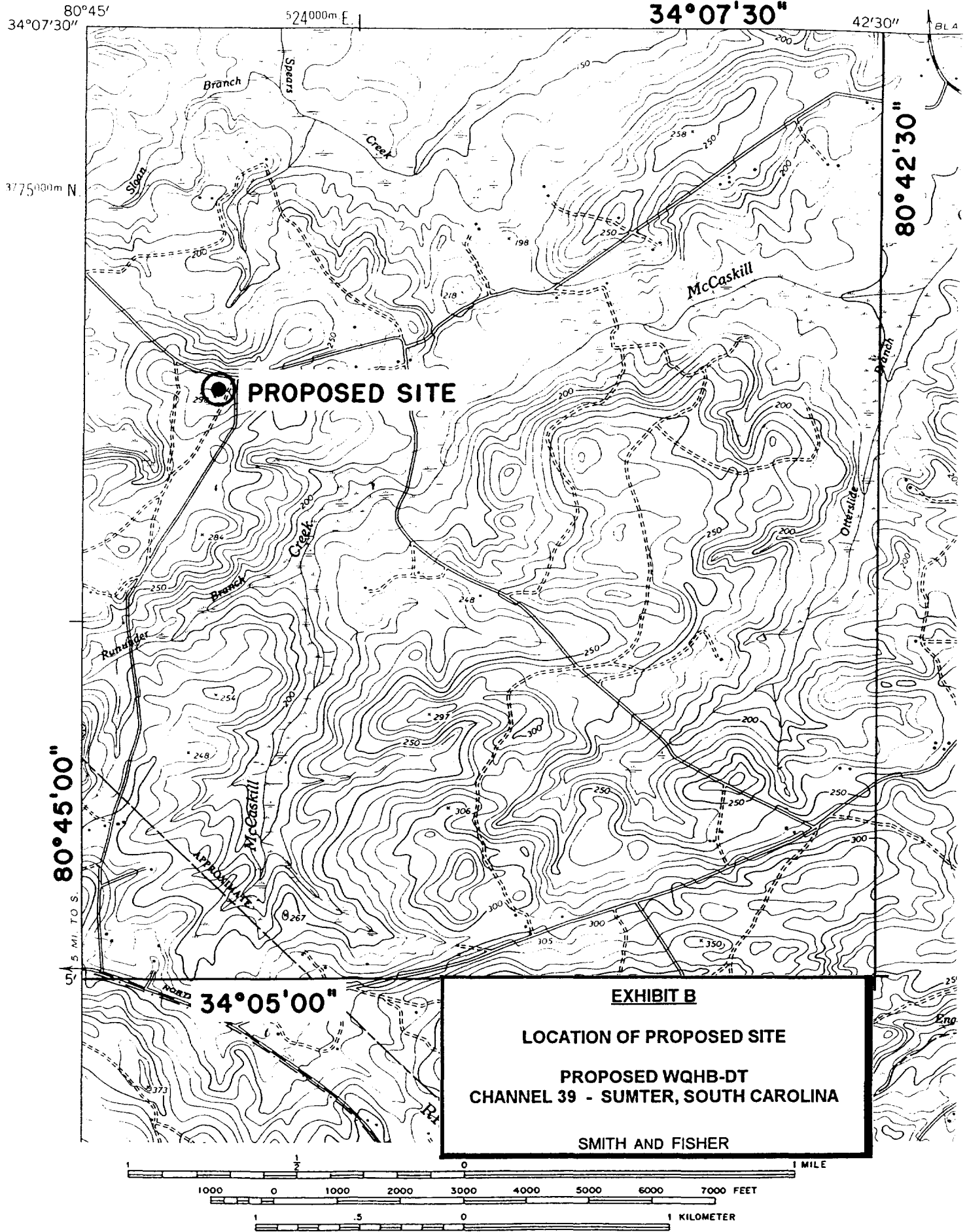
KEVIN T. FISHER

April 26, 2000

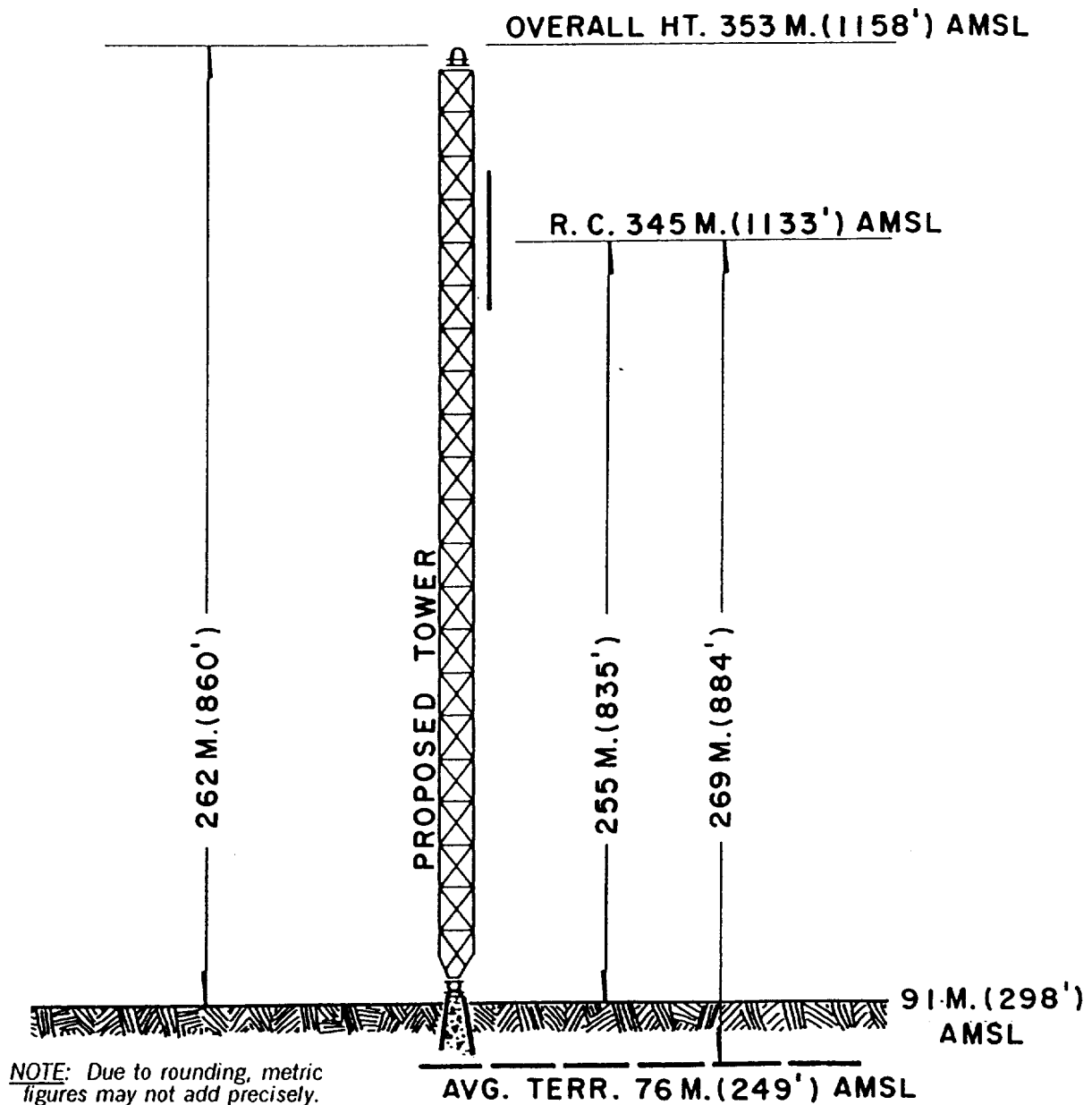
(BLANEY)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LEESBURG QUADRANGLE
SOUTH CAROLINA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 HAGOOD 15' QUADRANGLE



NOT TO SCALE



SITE COORDINATES :

34° 06' 33"

80° 44' 35"

EXHIBIT C

ELEVATION OF ANTENNA STRUCTURE

PROPOSED WQHB-DT
CHANNEL 39 - SUMTER, SOUTH CAROLINA

SMITH AND FISHER

EXHIBIT D

PROPOSED OPERATING PARAMETERS

PROPOSED WQHB-DTV ALLOTMENT
CHANNEL 39 - SUMTER, SOUTH CAROLINA

Channel Number:	39
Zone:	2
Site Coordinates:	34-06-33N 80-44-35W
Antenna Structure Registration Number:	1211120
Tower Site Elevation (AMSL):	91 meters
Overall Tower Height Above Ground:	262 meters
Overall Tower Height Above (AMSL):	353 meters
Effective Antenna Height Above Ground:	255 meters
Effective Antenna Height (AMSL):	345 meters
Average Terrain Elevation (2-10 miles):	76 meters
Effective Antenna Height Above Average Terrain:	269 meters
Antenna Make and Model:	Propagation Systems PSI PSIUSM16EC/39
Orientation:	180° T
Electrical Beam Tilt:	1.0°
Polarization:	Horizontal
Effective Radiated Power (main-lobe, maximum):	500 kw

ANTENNA RADIATION VALUES

PROPOSED WQHB-DTV ALLOTMENT
CHANNEL 39 - SUMTER, SOUTH CAROLINA

<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	0.26	15.3	180	0.93	26.4
10	0.26	15.3	190	0.93	26.4
20	0.26	15.3	200	0.94	26.5
30	0.30	16.5	210	0.94	26.5
40	0.38	18.6	220	0.96	26.6
50	0.49	20.8	230	0.98	26.8
60	0.62	22.8	240	1.00	27.0
70	0.74	24.4	250	1.00	27.0
80	0.84	25.5	260	0.98	26.8
90	0.92	26.3	270	0.92	26.3
100	0.98	26.8	280	0.84	25.5
110	1.00	27.0	290	0.74	24.4
120	1.00	27.0	300	0.62	22.8
130	0.98	26.8	310	0.49	20.8
140	0.96	26.6	320	0.38	18.6
150	0.94	26.5	330	0.30	16.5
160	0.94	26.5	340	0.26	15.3
170	0.93	26.4	350	0.26	15.3

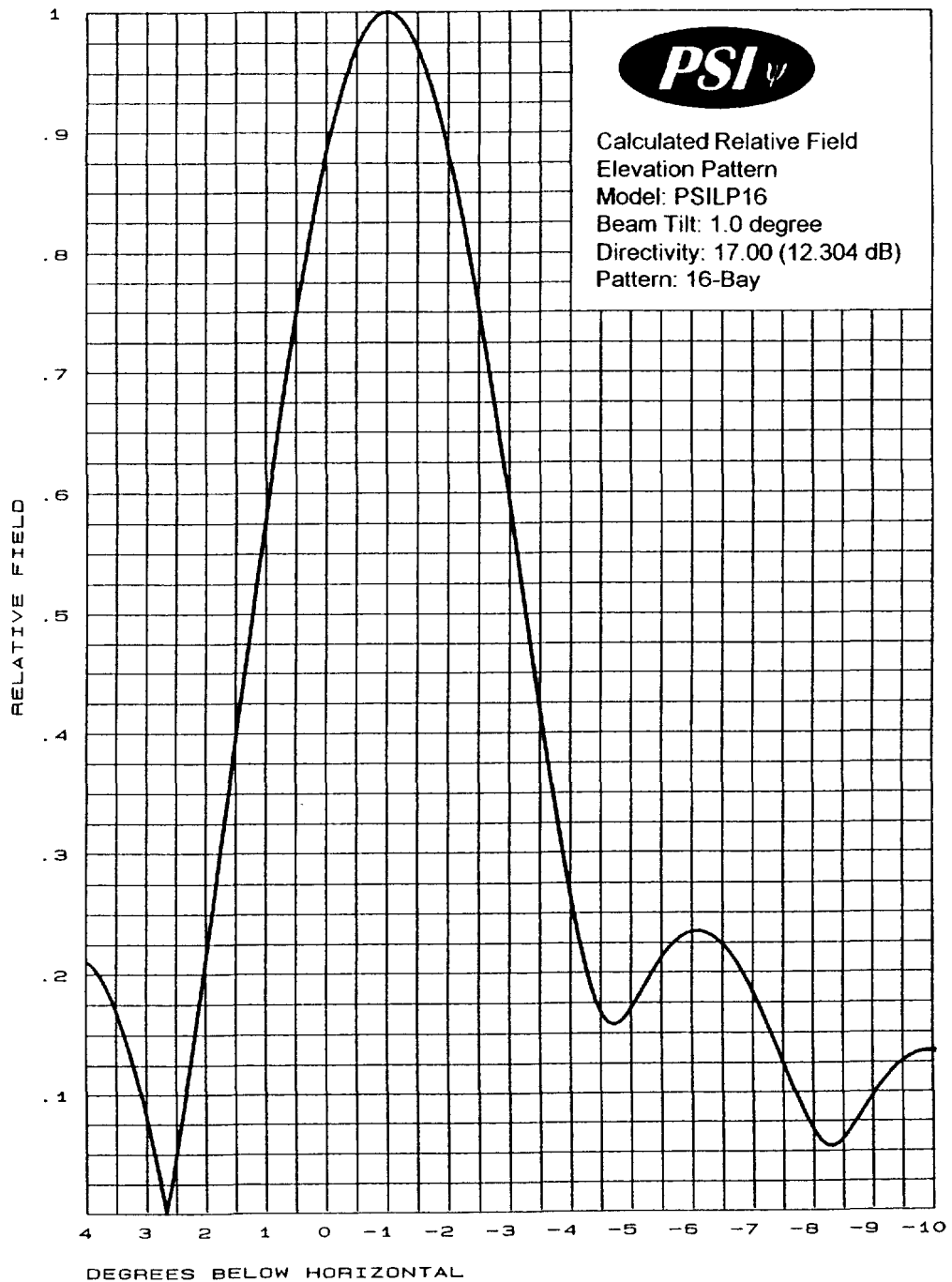
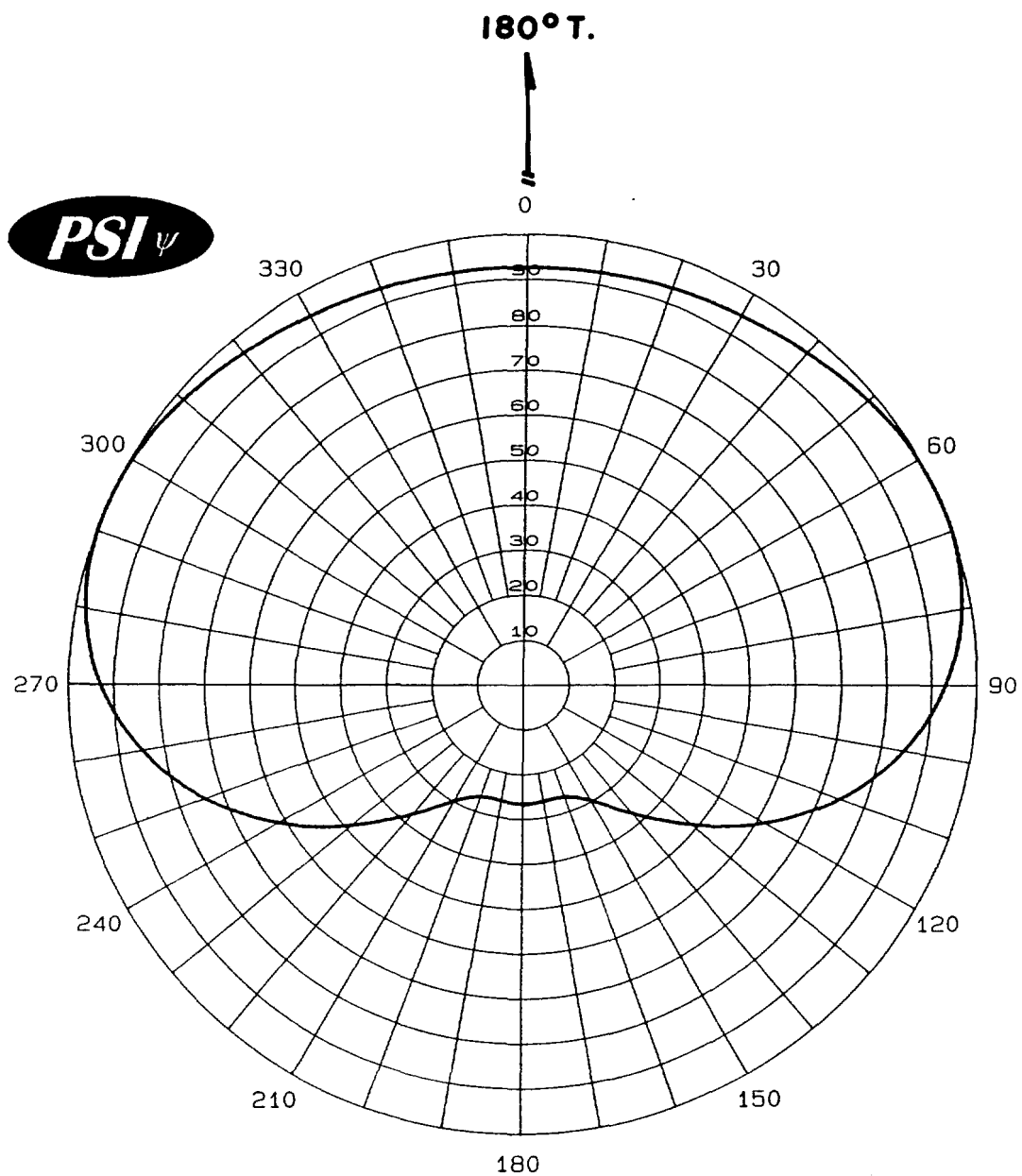


EXHIBIT E-2

ANTENNA ELEVATION PATTERN

**PROPOSED WQHB-DT
CHANNEL 39 - SUMTER, SOUTH CAROLINA**

SMITH AND FISHER



**NOTE : ANTENNA WILL BE MOUNTED SUCH THAT
0° ON GRAPH WILL BE ORIENTED AT 180° T.**

Calculated Relative Field
Azimuth Plane Pattern
Low Power UHF Slot
Antenna Type: PSILP
Pattern Type: EC
Directivity: 1.627 (2.114 dB)
Date: 7/1/97
Rev. 0

EXHIBIT E-3
ANTENNA AZIMUTH PATTERN
PROPOSED WQHB-DT
CHANNEL 39 - SUMTER, SOUTH CAROLINA
SMITH AND FISHER

EXHIBIT F

ELEVATION AND CONTOUR DATA
 PROPOSED WQHB-DTV ALLOTMENT
 CHANNEL 39 - SUMTER, SOUTH CAROLINA

Az. (° T)	Avg. Elv. AMSL 2 to 10 Miles meters*	Effective Ant. Ht. AAT meters	ERP (dbk)	Distance to Predicted Digital Contour (41 dbu) km.
0	78	267	15.3	69.4
45	44	301	19.7	78.0
90	48	297	26.3	88.8
135	59	286	26.7	88.1
180	80	265	26.4	84.6
225	113	232	26.7	81.3
270	104	241	26.3	81.5
315	81	264	19.7	74.4
120**	46	299	27.0	90.5

Height of radiation center above mean sea level	345 meters
Height of average terrain above mean sea level	76 meters
Height of radiation center above average terrain	269 meters
Effective radiated power, main lobe, maximum	27.0 dbk, 500 kw

Geographic Coordinates

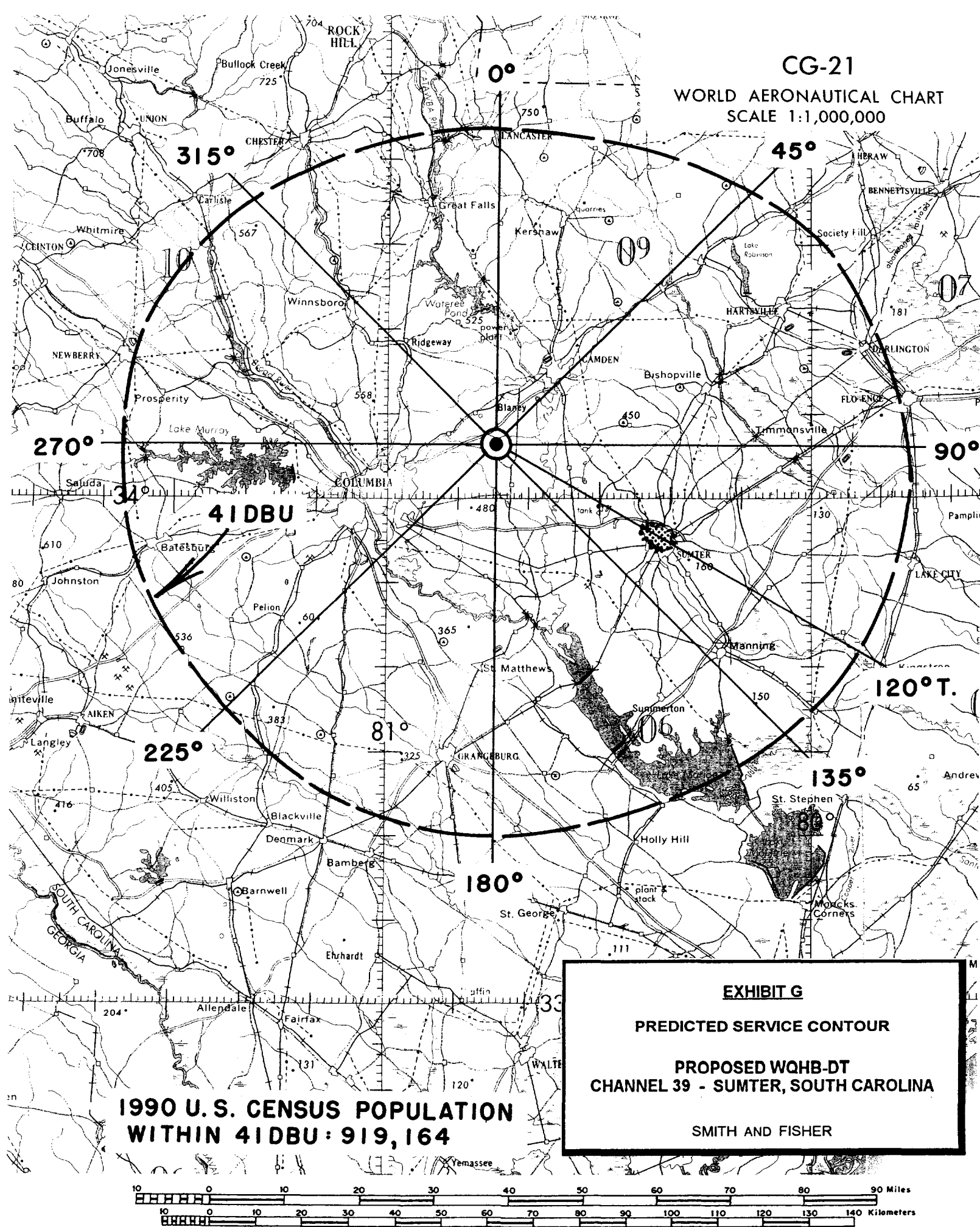
N 34° 06' 33" W 80° 44' 35"

**Source of terrain data: Defense Mapping Agency 3-second terrain database.*

***Radial through Sumter – not included in average.*

CG-21

WORLD AERONAUTICAL CHART
SCALE 1:1,000,000



1990 U. S. CENSUS POPULATION
WITHIN 41DBU: 919,164

EXHIBIT G
PREDICTED SERVICE CONTOUR
PROPOSED WQHB-DT
CHANNEL 39 - SUMTER, SOUTH CAROLINA
SMITH AND FISHER

ALLOCATION AND INTERFERENCE STUDY
PROPOSED WQHB-DTV ALLOTMENT
CHANNEL 39 - SUMTER, SOUTH CAROLINA

An interference study was conducted using the operating parameters of the facility described herein to determine if it meets the FCC's *de minimis* interference requirements of Section 73.623(c)(2) of the Commission's Rules. Specifically, the proposed facility may not cause more than two percent interference to the service population of a DTV or NTSC facility, nor can its interference contribution result in an excess of 10 percent total DTV interference to the service population of any DTV or NTSC facility.

The service area of a DTV station is defined as that which is calculated using the Longley-Rice propagation model to receive a signal of 41 db μ or greater and lies within the predicted 41 db μ contour of the station using the F(50,90) curves, the station's effective radiated power, and 2-10 mile terrain averages along each radial.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe" computer program, which has been found generally to mimic the FCC's program. Changes in interference caused by the proposed allotment facility to other pertinent stations are tabulated in Exhibit H-2.

As indicated, the proposed allotment would not contribute more than two percent DTV interference to the service population of any potentially affected NTSC or DTV station. In addition, this proposal does not result in any NTSC or DTV station receiving more than ten percent total DTV interference to viewers living within the station's authorized or proposed service area.

Therefore, this proposal meets the FCC's *de minimis* interference standards as defined in Section 73.623(c)(3) of the Commission's Rules.

EXHIBIT H-2

DE MINIMIS INTERFERENCE ANALYSIS

PROPOSED WQHB-DT
CHANNEL 39 - SUMTER, SOUTH CAROLINA

NTSC FACILITIES

<u>INTERFERENCE LOSSES (POPULATION)</u>												
<u>Call Sign</u>	<u>City, State</u>	<u>Ch.</u>	<u>Grade B Population F(50,50)</u>	<u>NTSC Only</u>	<u>NTSC & DTV Without WQHB-DT</u>	<u>Unmasked DTV</u>	<u>%¹</u>	<u>NTSC & DTV With WQHB-DT</u>	<u>Unmasked DTV</u>	<u>%¹</u>	<u>WQHB-DT Contribution</u>	<u>%²</u>
-- NONE --												

DTV FACILITIES

<u>INTERFERENCE LOSSES (POPULATION)</u>												
<u>Call Sign</u>	<u>City, State</u>	<u>Ch.</u>	<u>NTSC/DTV³ Grade B Pop. Longley-Rice</u>	<u>NTSC Only</u>	<u>NTSC & DTV Without WQHB-DT</u>	<u>Unmasked DTV</u>	<u>%¹</u>	<u>NTSC & DTV With WQHB-DT</u>	<u>Unmasked DTV</u>	<u>%¹</u>	<u>WQHB-DT Contribution</u>	<u>%²</u>
WFVT-DT (CP)	Rock Hill, SC	39	2,238,434	15,126	21,744	6,618	0.3	36,523	21,397	1.0	14,779	0.7
WFVT-DT (Allot.)	Rock Hill, SC	39	2,253,647	15,529	22,111	6,582	0.3	37,289	21,760	1.0	15,178	0.7
WSB-DT	Atlanta, GA	39	3,432,890	9,336	16,452	7,116	0.2	17,282	7,946	0.2	830	< 0.1
WSAV-DT	Savannah, GA	39	705,762	0	165	165	< 0.1	674	674	0.1	509	0.1
WFVT-DT (200 kw)	Rock Hill, SC	39	2,303,919	17,555	24,132	6,577	0.3	48,636	31,081	1.3	24,504	1.1

¹ Cannot exceed 10% of Grade B Population.

² Cannot exceed 2% of Grade Population.

³ Larger of either NTSC Grade B population (with no DTV losses) or DTV Grade B population with all losses.

APPENDIX 2

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December 30, 1999

Via Hand Delivery

The Hon. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

For transmittal to the attention of

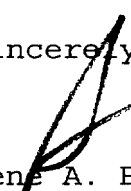
J. John Morgan
Assistant Chief (Engineering)
Video Services Division
Mass Media Bureau, Room 2-C864

Dear Ms. Salas and Mr. Morgan:

On behalf of McLaughlin Broadcasting, Inc. and in accordance with the FCC's public notice dated December 7, 1999 (DA 99-2739), this is to provide notice of intent to maximize the DTV facilities of WQHB-TV, Sumter, South Carolina. In the event maximization cannot be achieved on the station's assigned digital channel, the station may seek leave to petition for a different channel as the means of maximizing DTV facilities.

If there should be any questions concerning this matter, please contact me.

Sincerely,


Gene A. Bechtel

Counsel for WQHB-TV

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